THE TENNESSEE FARMER.

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PROSPECTUS
OF
THE TENNESSEE FARMER.

Considerable interest having been manifested by a portion of the subscribers to this work that it should be continued, and our subscription list not having decreased as we had apprehended, another volume will be offered to the public, commencing with the approaching new year. Of the importance of such a paper to the interests of agriculture in our state, there can be but one opinion. The light of science has visited almost every other department of human avocation, and produced its wonted and salutary results in each; and now that the agricultural world is waking up to new impulses in this most noble, necessary, and primitive pursuit of man; and now that, in other sections of the country, learning is developing the secrets of the art, and common sense is collating and investigating the experience and habits of the past, and a general disposition seems to have been excited among practical farmers to *know* what they are doing, we earnestly hope that our native State will not lag behind the spirit of the age, but that her enterprising population will evince their determination to carry with them the aids of knowledge and intelligence in their prosecution of this great element of individual happiness and of rational prosperity.

To sustain this paper and to extend its usefulness, an increased subscription is exceedingly desirable. We would, therefore, respectfully but earnestly ask *each* of our present subscribers who feel an interest in its existence, to aid in enlarging its circulation by the procurance of new subscribers. Such favors we will endeavor to requite by our humble but earnest efforts to give to the pages of the "Farmer" an interest and usefulness, which, we trust, will not dishonor their exertions in its behalf.

TERMS.

THE TENNESSEE FARMER, is published Monthly at $1,50 per annum, but $1 will be received if paid in advance. Payments made within three months of the commencement of the year will be considered in advance.

All subscriptions must commence with the year.

No subscriptions discontinued, but at the option of the Editor, until all arrearages are paid.

All letters on business in any way connected with the Tennessee Farmer must be addressed to Thomas B. Emmerson Jonesborough Ten. and in order to ensure attention must be POST PAID.

According to the decision of the POST MASTER GENERAL, the Tennessee Farmer is subject only to newspaper postage, viz: one cent for each number within the State or within one hundred miles from Jonesboro', out of the State; one and a half cents to any other part of the U. States.

Jonesboro', December 1837.

TO MAKE CROQUETS.

Take cold fowl or fresh meat of any kind, with slices of ham, fat and lean—chop them together very fine. add half as much stale bread grated, salt, pepper, grated nutmeg, a teaspoonful of catsup, and a lump of butter; knead all well together till it resembles sausage meat, make them in cakes, dip them in the yolk of an egg beaten—cover them thickly with grated bread, and fry them a light brown.

The proper time to use economy in feeding farm stock.

It has been, and still is, an almost universal custom amongst farmers, to take little or no pains, to ascertain how much food is necessary for any particular kind of stock. Consequently in the fall of the year, when grain and provender is abundant, it is lavished out to the stock in such quantities, that a large portion of it is wasted. This practice is continued, until the supply is so far exhausted that the farmer becomes alarmed, lest his stock of grain and provender will not hold out until the pasturing season again rolls round. Then, for the first time he begins to think about economising, but not knowing the proper quantity which is necessary to keep a horse, a cow or a hog in the best condition for wintering, he reduces the quantity given, to suit the supply on hand;—which, in most cases, is little more than just enough to keep the animal alive until grass;—hence, the cause of so much poor stock in the spring of the year. If a farmer would take a little trouble, he would soon ascertain the quantity of food necessary for his stock.—Let him then in the *fall of the year*, when his barns and his cribs are filled to overflowing, commence using that economy, which wisdom, and prudence, so strongly urge upon him.

We will thank the Post Master at Pulaski, Tennessee, to act as our Agent for the Tennessee Farmer.

Persons in that section of country who have not paid the amount of their subscriptions, will please tender the amount to him.

SWEET POTATO PUDDING.

Boil one pound of sweet potatoes very tender rub them while hot through a culender; add six eggs well beaten, three quarters of a pound of powdered sugar, three quarters of butter, and some grated nutmeg and lemonpeel, with a glass of brandy; put a paste in the dish, and when the pudding is done, sprinkle the top with sugar. Irish potato pudding is made in the same manner, but it is not so good.

COMMUNICATION.

For the Tennessee Farmer.

SLEDGE HAMMERS.

I have found a new use for this tool of masonry, and recommend it to my brother farmers, wherever limestone may abound. Loose rock upon the surface, has hitherto been accounted a nuisance; and so it is, without the use of the Sledge; but with it a positive benefit.

The following is the process:—Instead of hauling out, or stacking the rocks as many do, pulverize them where they lie, and you have converted this imaginary nuisance into a benefit; and should the rock greatly abound, make a few feet of fence every winter out of it, avoiding if possible, stacking or hauling out.

The finer you break it the better. If it were ground, I have no hesitation in saying it would be superior to lime, and perhaps to marl or gypsum.

Every farmer of observation knows, that lime does not benefit plants much, until the second year; requiring a winter's rain and much atmospheric action to bring it down from its costic nature, to a state of mildness, fit for the stimulous and pabulum of vegetation; not so with pulverized limestone, it is nourishing from the start; nor has it the tendency to harden land as does lime, but to make it loamy.—I intend not to speak against the use of lime as a manure, for I believe it to be an excellent one on loose sandy soil, or on any soil where it it is not.

CART PLOUGH.

I call it by this name, because I chain it to my cart when I break fallow ground.

I never saw, but only heard of this mode of ploughing as practiced upon the prairie lands of the West. I tried it, and shall never quit it, unless I quit farming. The plough I use is very large, with a cast mould; it opens a furrow 14 inches, the depth of which, I regulate to the strength of my team, by lengthening the chain confining it to the axle; by shortening of the same, my plough is set shallow, and by sliding it to the right or left upon the axle, I take more or less land. The depth you set your plough, it will keep throughout the season; this is a singular advantage. And I take the entire field in the circuit, going round and round, until I close at the centre; avoiding as you go, the very great disadvantage of central furrows, and the labor too, of lifting the plough round. Notwithstanding my plough is very heavy, a 12 year old boy can follow it. I use oxen altogether, and two yoke at a time.—What I loose in speed, I gain in width of furrow; thereby making as much progess as I could with horses.

I find it an excellent contrivance for training young oxen. I put them behind a well trained yoke; thereby avoiding the unpleasant task of beating and bruising to make them render service on the good old plan. I sometimes put a small boy behind to drive, or ride an ox, as the case may be.

I most seriously recommend this mode of breaking fallow ground; it is cheap, expeditious, and superior, and all in all, it is a kind of contrivance which performs its task, in a better manner than any I have ever yet seen.

PARVUS AGRICOLA.

Lagado, Ten., Nov. 1837.

The following from a gentleman in West Tennessee, is like a number of others which we have recently received. Let but a few more of our subscribers *serve us in the same way*, and we will be induced to *cry* out the Farmer *shall* be con inued.—*Ed. Ten. Far.*

I have been inexcusably delinquient. I hasten to atone for it by inclosing five dollars—place it to my credit. And at all hazards continue the Tennessee Farmer.

Very respectfully,

An exchange paper says:—"Any person leaving two hundred dollars at this office will receive the thanks of the editor."

We will be satisfied with half the amount on the same terms.—*Vevay (Ia.) Times.*

We will be satisfied with *two* dollars of the amount, and give in exchange for that sum the Franklin Farmer for twelve months. Our proposition, we think, will be the first acceded to.

Franklin (Ky.) Farmer.

And we will be satisfied with *one* dollar of the amount and give in exchange for that sum the Tennessee Farmer for 12 months.—*Editor Ten. Far.*

IMPROVEMENT OF STOCK.

From the Albany (N. Y.) Cultivator.

THE PHILOSOPHY OF CROSSES.

Few persons who have reflected on the matter at all, will be disposed to deny, that between the animal organization of man and of brutes, there exists a striking similarity. In the functions of reproduction, nutrition, digestion; in the materials of bodily structure; in the gradual reaching of the highest point of animal vigor and perfection, and in a gradual decay; in the purely animal propensities and their consequences; the accomplishment of the same ends by the same means, and an identity of results; man as an animal, and the brute, scarcely differ. This fact does not in the least affect his moral and intellectual distinction and superiority; it is not these things, strictly speaking, that constitute the *Man*. This community of constitutional feelings and functions being clear; the fact may we think be advantageously used in many questions of animal sympathies, habits, and organization; by illustrating those things which are but imperfectly understood in the animal, by the corresponding habits and sympathies which belong to man as an animal, and which have been made the subjects of closer investigation, and rigid analysis.

The effect which the intermixture of different races of horses, cattle or sheep, or what in other words is called the crossing of breeds, has upon the progeny, in raising or lowering the character of the animal, uniting the good qualities of both to a common standard, is a question of the greatest interest to the farmer; and which it is presumed may be made intelligible, and the results better understood by a consideration which such processes have upon man. Dr. Pritchard has laid down two rules as the result of extensive observation on this matter.—"First, that the organization of the offspring is always modelled according to the type of the *original structure of the parent;* and, secondly, that changes produced by adventitious or external causes in the appearance or constitution of the individual are temporary; acquired characters in general being transient, terminating with the individual, and having no effect on the progeny."

Illustrations of the first proposition may be found in the mixed races of white and Indian in Canada, in North America; the Spanish and Indian in South America; the English and Hindoo in India; as well as other less distinctly marked instances in other parts of the world. In these cases it is invariably found, that the progeny is far superior in hardihood and capability of enduring the peculiarities of climate to the imparted parent, but inferior in mental capacity and endowments; while its moral and intellectual capacities are proportionably elevated above the native races of those countries. As proof, we refer to the half breeds of the Canadas and Cherokees, many of whom appear to combine the native cunning of the Indian with the cool deliberation of the white;—to the mulattoes of St. Domingo; who now hold the rule of that fertile island in defiance of both whites and negroes;—to the mixed race in Colombia, many of whom are prominent characters in the republic, Gen. Paez, now president of Venezuela, for instance;—and to India, where the half breeds are so decidedly superior to Europeans in physical, and to the natives in mental qualities, that they may already be considered as marked out for the future sovereigns of the east.

In applying these principles to the crossing of breeds of cattle, it will be sufficient to mention the improvements effected by Sinclair and others in Scotland, and by Bakewell and others in England. In Scotland, the native breeds of cattle were a small black buffalo looking race, worth little for labor, and still less for the dairy. Some men, called book farmers, determined to make an experiment of improving the stock by crossing the breed, and combining, if possible, the size and valuable qualities of the English cattle, with the extreme hardihood of the native black cattle; as the former, when pure blooded, with food with difficulty the severe winters of the Highland. The result fully justified their anticipations, some most valuable breeds of cattle, among which is the celebrated Ayrshire, were gradually produced, and have become fully acclimated; while the black cattle and the tartan have disappeared, except from some of the most remote and unfrequented vallies of that wild country.—What has been done in improving cattle, we have had occular demonstration before us, in the beautiful full bred animals that within a year have been imported from abroad; particularly those introduced by the patriotic agriculturists of Ohio.

The horse too, may be mentioned as illustrating the principle laid down in the above extract. The swift and beautiful Arabian would be unable to withstand our severe climate and exhausting labor; yet by mixing his pure blood with our hardier and heavier races of animals, breeds are obtained, adapted to the climate; yet combining the fleetness of one, with the bone and muscle of the other. The original qualities of the parents are generally decidedly shown in the offspring, or if partially obscured in one individual, succeeding ones show they are not lost; the constitutional type remains permanent and unimpaired.

Perhaps the pernicious effect of breeding in and in, as it is called, that is propagating races and families without crossing, or paying proper regard to the qualities of the parents; and the obvious benefits of selecting the best breeds and improving them by crosses, cannot be better shown, than by an example or two selected from well known facts respecting the human family. In Spain and Portugal, and a less degree, some other European countries, the degeneracy and even idiocy of some of the noble and royal families, caused by constantly intermarrying with each other nephews, nieces and cousins, is a subject of common remark, and obvious to the most careless observer. Viewed phrenologically their heads show that the mental and moral powers are diminished to the lowest ebb, while their animal organization continually gains in ascendancy. The late king of Spain, Ferdinand the 7th. was a striking example of this; as his projecting lips and chin, and sunken forehead, gave his head an aspect more resembling a baboon than a man; and as was to be expected from such a conformation, in him the animal powerfully predominated.

On the contrary, all travellers agree, that the finest specimens of men any where to be seen, are to be found among the higher ranks of the nobility and princes of Turkey and Persia. This is accounted for by the fact, that from time immemorial the custom has existed in those countries of purchasing the most beautiful and perfect Georgian and Circassian girls, and forming connexions with them as wives. Perhaps there is no country in which can be found individuals in whom the moral and intellectual development is higher than among these beautiful captives; and thus, by constantly crossing the blood of the nobles of those countries; who alone can be the purchasers, the constant tendency of their lives to sensuality and mental effeminacy is counteracted. The London Quarterly Review, one of the best authorities on the subject, says, that some of the most beautiful women in England, if not in the world, are to be found among the milliner girls in London; the illegitimate and unowned offspring of the nobility, from connexion with the most beautiful and intellectual of the middling classes, females who have rarely been able to resist the combined influence of rank and wealth. These facts, which are not to be disputed, seem to place the proposition that the progeny will resemble the original structure of the parents beyond a reasonable doubt.

There may be exceptions to the rules indicated by the above ascertained facts; as a good cow may have a bad calf, or a bad cow a good one; and now and then a respectable, intellectual man, or a beautiful woman may spring from a stock to which in general such qualities are utter strangers. But these changes are temporary, owing to adventitious circumstances, and do not spring from any constitutional alteration; consequently they usually disappear with the individual. So too in the best races of men or animals, inferior specimens may occasionally be found, yet their progeny will usually have redeeming qualities, which show the excellence of the stock from which they sprung. Their faults are purely accidental or individual; they do not belong to the constitution of the race, and therefore end with the one on whom the faults are found.

Experience has shown that there is little danger in breeding from a horse which is not perfectly unexceptionable, if his pedigree shows in both lines an unbroken succession of good blood; his faults do not belong to the breed, and are therefore rarely if ever propagated. But if in his pedigree you find a cross of decidedly inferior blood, beware lest you do not find the defects of the parent continued in the progeny; a sure proof that the difficulty is constitutional, and the defect one which can no more be got rid of than the hair or hoofs.—Bad blood will sooner or later show itself; it is like the disposition to lunacy in certain families, sometimes passing two or three generations and then becoming again fully developed. We have witnessed another singular illustration of the tenacity with which constitutional defects cling to a race, in a family in which in both the male and female lines there is a tendency to produce individuals with six fingers and six toes; and in which scarcely a family of children can be found, one or more of which are not distinguished by this extra member.

The practical inferences we would wish those who are engaged in the laudable effort of improving horses, cattle or sheep, by crossing breeds, or by importing, to draw from the above remarks, are first, to get the best blood belonging to the breed; and secondly, to secure animals that combine the greatest number of valuable qualities for their experiments. In this way only can they expect the full success which should crown their labors. If our native breeds are to be made in part the basis of operations, for instance, a native cow and an imported bull, it is clearly increasing the chance of a valuable progeny to select a cow combining in a good degree, aptitude to fatten, strong constitution and capability of enduring our severe winters, a kind disposition, and withal a good milker. Such cows can be found among us, and if they were more common, or a certainty they would produce their like, the necessity of imported stock would be much less

urgent than it now is. Now, unless there is a trace of foreign blood in the animals there is no certainty, scarcely a probability, that the progeny will resemble the parent; the excellencies are merely accidental, they do not belong to the original stock, they are not in type, and therefore will be evanescent.

A short sketch of the various crosses which have produced the present improved breeds of cattle in England, may not be out of place here. In Great Britain, the *Short horns*, one of the valuable kinds, and which is now principally sought after in this country, comprise the decendants of the Dutch breed, the parents of the original Durhams;—the Teeswaters a cross between the Durham and the Alderneys; —the Holderness improved by a cross with the Teeswaters; and the Yorkshires, a cross between the improved Hollerness, and the improved Short horns. The *'imported short horns,'* the best breed of cattle existing, considered in every respect, is a cross of the best Teeswater or Durham, with the Galloway from the north of England, and no animal can be considered as of undisputed blood whose pedigree cannot be traced up to the celebrated Teeswater bull Hubback, owned by Mr. Colling, the original improver of the breed. Next to the improved Short horns, the Devonshire breed, are ranked in value. They are supposed to belong to the original stock of cattle in Great Britain, uncontaminated by foreign intermixture. Mr. Bakewell, by breeding from the best animals that could be selected, brought the Devons to such a state of perfection, that all attempts at crossing by other breeds have only deteriorated instead of improving the breed: and though for some purposes partially suspended by the Short Horned Durhams, they are still deservedly great favorites. In beauty and uniformity of color, a dark rich mahogany, the Devon has the advantage over the Short horn, while the latter clearly asserts the supremacy in form.— The celebrated Ayrshire breed sprang from a cross of the native Holderness and Highland with the Durham.

It is, perhaps, unnecessary to illustrate this subject further. What has been done abroad can be done here; and our agriculturists should remember that they stand on the high vantage ground gained by the experiments and the labors of centuries. The ground already travelled by the pioneers in the improvement of breeds is not again to be gone over; the point of success reached by others is our starting point; and much shall we be to blame, if with all the additional light of science, and the experience of years, in our possession, we suffer improvement to retrogade, to go backward instead of forward. W. GAYLORD.

Onondaga County, 1837.

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A correspondent writes that his "turnips have been literally cut off by the grasshoppers," and asks what he "shall do another year to prevent their ravages?" Our advice is, that he should sow his turnip seed earlier, say as early as the 20th of July. By so doing, he will catch the grass-hoppers in a state so young that they will be unable to do any material harm before his turnip plants will have grown out of harm's way from insects. They will even then have to contend with the *flea* or *fly*, but their chance of escaping destruction will be much better, as they will only have one enemy instead of two to struggle with.—*Balt. Far. & Gard.*

A New Hampshire farmer gathered seventy-two bushels of fair, handsome apples, enough to make nine barrels of cider, from one tree, and harvested twenty five bushels of wheat from less than half an acre of land planted with one bushel of seed wheat.—*Eastern paper.*

THE GREEN CROP SYSTEM.

From the "Agricultural Papers" of Agricola, in the Downpatrick Recorder.

The farmer's life displays in every part,
A moral lesson to the sensual heart.
BLOOMFIELD.

To prevent a long digression in my last paper, I was obliged to assume that, though there are some crops which impoverish the soil very much, there are others "which are more grateful to it, and which instead of impoverishing it, afford a reciprocal advantage, by imparting to it richness." But as this statement contains the fundamental principle of the important system which I am advocating, it should not be taken on trust; and, accordingly, the object of my present paper is to show, that the green crop system is not founded on a false assumption, but on an *important truth*.—The whole crops of the farmer may be divided into two classes—the grain crops and the green crops. The former are sometimes called *culmiferous* or straw-bearing; and the latter, *leguminous*, from their seeds or leaves being of a much larger kind. Clover, beans, turnips, potatoes, &c., are leguminous plants, or belong to the class called green crops. Now, it has been proved, by experiments made for the express purpose of ascertaining, and is, therefore, beyond a doubt, that plants are not nourished by the soil alone in which they grow, but that much of their sustenance is drawn from the atmosphere; of course, they do not derive the same degree of support from either of these causes—some are nourished more by the earth, and others more by the air. Grain crops are of the former kind. As they have but small leaves, and few of them, and thus present but a small surface to the atmosphere, it is plain that little of their nourishment can be derived from it; they must, therefore, be supported almost entirely by the soil. This is particularly the case when the crops have nearly ripened, when the few leaves they have are withered and dead, or have fallen off; they can then draw, perhaps no nourishment from the air, but must be supported almost entirely by the soil. But the fact is not so extensively known as it deserves to be, that, at this period, when the seed is forming, the plants require an extraordinary quantity of nourishment; and hence it is that grain crops are so particularly exhausting to the soil. In proof of this, I may refer, with confidence, to the experience of any intelligent practical farmer. He knows, that if the grain be allowed to stand uncut after it has ripened, it exhausts the soil exceedingly; but, that if cut green, the impoverishing effects have not been so extensively produced. Now the green crops or leguminous plants, on the contrary, present an extensive surface to the action of the atmosphere, and, therefore, can draw much of their nourishment from it, without requiring to draw so extensively from the soil. A familiar proof of this may be had from the common cabbage. Its numerous broad leaves enable it to draw most of all its nourishment from the atmosphere, and hence it is that cabbages can be preserved for a long time in a fresh state, if cut and hung up in a damp place. House-leek is another plant which has broad succulent leaves and who does not know that it will grow in the most unfavorable situations? If hoisted on a pole, or laid on a slab of marble, it will flourish most luxuriantly. But this is not all; some plants have been proved to exist, and thrive, and come to maturity, when nourished by the atmosphere alone—growing in pounded quartz, (a substance resembling flint,) and supplied with distilled water, to prevent the presence of the smallest particle of earthly matter! Another important fact is, that all the seed of a grain crop comes forward at the same time.—Whenever it has properly "shot," the plant stops growing—its seeds begin to form, its leaves wither, its roots cease to act in the ground, and, when cut down, it is dry and hard. The green crops, on the contrary, bear blossoms and seed at the same time; the roots are continually pushing forward in the ground, and the leaves are green and sappy as before, so that the plant never exerts itself to impoverish the soil. Every one knows, for example, that beans and peas may be pulled from the lower part of the stalk, while the top is bearing blossoms and embryo fruit; that one branch of a stalk, of clover will be in flower and another in seed; and that the top of a potato stalk will wave in verdure and bloom, when the crabs and leaves have fallen off the lower part. It may not be out of place to mention here a serious error in which many farmers fail. They allow their rye grass to remain uncut long after it has come to maturity, alleging as a reason, that "unless it is 'dead ripe,' it will never do for seed." They forget that it is cultivated chiefly for the hay, and not for the seed; and that by allowing it to become ripe, they are disappointed of their object, as much of the seed is lost in the necessary operation of saving the hay.—Besides, the quantity or weight of the hay is diminished by the parching and withering it has undergone; its quality is deteriorated, as it is rendered less palatable and less nutritious to cattle; and the fertility of the soil is greatly injured. To prevent these consequences, a small spot should be kept to furnish seed, but all the rest should certainly be cut green; the pasture produced as an aftergrowth would of itself be a sufficient remuneration for the loss of seed.—A remarkable difference between the grain

crops and green crops, is, that the former tend to bind the ground and harden it, the latter to open and pulverize it. This is partly to be accounted for from the difference of their roots. Those of the one kind being numerous and fibrous, unite the different parts of the soil firmly together, without being large enough to produce such an action as would loosen it; those of the other kind being larger, and more of an opening nature, cause an action in the soil, during the process of growing, that reduces it to a soft and mouldy state. Another cause is the difference of their fitness to admit moisture. When dew or rain falls upon a grain crop, nearly ripe, it glides down its hard, dry, bare stalk, and settles on the ground; but as this presents a hard bound surface, it remains there until the greater part of it is carried off again by the heat of the sun. When it falls on a green crop, it receives a shelter under the broad leaves, and, trickling down the stalk to a soil softened and prepared to receive it, it contributes to moisten it, and render it softer. Of all grain crops, wheat is by far the most severe upon the soil. It is, in the first place, exceedingly binding, and always leaves the ground in a hard state. Then it occupies the ground so long, that it requires an extraordinary degree of nourishment, from its sowing till its reaping; the weight of the grain, besides, requires a strong stalk, and much earthly matter to bring it to perfection. Of green crops, again, potatoes are the more loosening. They sink deep into the soil, and by the spreading of their roots in every direction, and the swelling of numerous bulbs, loosen it most effectually. It is said that a crop of potatoes is more effectual, in this respect, than a good ploughing would be. One thing however, is certain, that no matter what may be the color of the soil when the potatoes are planted, when they are turned up, their beneficial effects are apparent; for the soil is uniformly of a rich blackish color. If I were asked, which of the various kinds of potatoes is most pulverizing and beneficial to the soil? I should answer—notwithstanding the foolish prejudices which prevail respecting them—the "cups," or "west reds." Besides sinking much deeper into the soil, they are more numerous than other kinds, and, therefore, give it a more thorough turning up. Now from these facts, what inference can we draw? That a wheat crop should be preceded by the most loosening and fertilizing crop that can be had, viz: potatoes. They clean the ground, and, as is evident from the parallel I have drawn, they put it in a state of complete preparation for the wheat. It is absurd, then, to expect that as good crops of wheat will be produced on fallow ground, on which there have been no potatoes. Another conclusion, which is almost self-evident from the facts I have stated, is, that a green crop should succeed wheat, to compensate for the injury which the ground has sustained. This shows how utterly ruinous and unreasonable in the practice of taking several oat crops off the ground, immediately after wheat. Instead of nursing the soil, already too much exhausted, the very vitals are torn from it, and then, forsooth, it is permitted to "resist itself," until the omnipotence of idleness has completely restored it! Turnips are very good for the soil, but certainly not as good as potatoes. They derive, perhaps, more of their nourishment from the atmosphere, but their roots do not penetrate so far into the ground to loosen it. They are besides too late of being raised, to admit of being followed by a wheat crop; but they can be advantageously followed up by barley, which also suits a clean dry soil. Clover, too, is particularly fertilizing to the soil in which it is produced. Its lower leaves becoming withered, fall off, and rot about its roots and thus produce a valuable manure—decayed vegetable matter. Its slimy succulent nature keeps the ground always in a state of fertility, and its numerous dense leaves are particularly adapted for retaining the moisture that has been deposited by rains and dews. Who has not observed the rich unctious appearance of ground where clover has been cut shortly after the deposition of the moisture?—I hope, and believe, that I have now proved my assertion, to the satisfaction of all who may honor this paper with their perusal. Let it be remembered too, that, in referring to the reciprocal advantages which arise from a proper rotation of crops I have not once alluded to manures. If proper changes from grain crops to green crops, and *vice versa*, would almost of themselves, suffice to keep the land "in heart," what might we not expect, when in addition to this, one fourth of it would be well manured annually? This part of the subject brings me now to the important question already noticed. How is the manure to be produced?

March 29. AGRICOLA.

THE GREAT LOAF.

The great loaf of cake exhibited at the Mechanics' Fair in Boston, is composed of the following ingredients and in the quantities specified;—

Fifty-six dozen of eggs—eighty pounds of currants! *ninety* pounds of sugar, *ninety* pounds of flour, *seventy-eight* pounds of citron, *fifty* pounds of frosting, *fifty-six* pounds of butter, *four* pounds of spice! in all, FIVE HUNDRED pounds.

Even *half* of such a loaf might satisfy the most craving desire.

From the Albany (N. Y.) Cultivator.

AGRICULTURE

Should be patronized by the Government.

To whatever state, country or age, we direct our attention, we find the condition of agriculture, and the consequent substantial prosperity of the population and patronage which is extended to its labors by the government. When it is nurtured and respected, as it should be, as constituting the source of national wealth and independence—and as the great moral conservator of a community—we find the great body of the people industrious, frugal and prosperous. But where agriculture is degraded as a menial employment, and neglected by the government, we find commerce and manufactures at a corresponding low ebb, and the population ignorant, indolent and vicious.

In Great Britain, agriculture has received the fostering care of the government, in her agricultural surveys, premiums and protecting duties; and she is indebted to this branch of her industry more, probably, than to her commerce or manufactures, singly, for her unprecedented state of prosperity. Every agricultural laborer there, feeds three mouths besides his own—four millions of agriculturists feed a population of sixteen millions. No country has made greater strides in agricultural improvement during the last fifty years, than Scotland, under the stimulating influence of her agricultural society, and thousands of dollars which she has annually distributed in premiums. Her commerce and manufactures have increased with the products of her soil, as has also the industry, intelligence, probity and comfort of her population.

Contrast with that of Britain, the social and pecuniary condition of Spain, where agriculture has received no encouragement or patronage from the government, and where it consequently receives but little attention from the people. An ignorant, superstitious populace spend their time in indolence and want—the soil, naturally fertile, is neglected, her commerce languishing, her manufactures a mere cypher, and the country torn by civil dissentions, and verging to barrenness and desolation. Such, too, is the condition of a part of once fertile Italy, of a great portion of eastern Europe, of Asia Minor, Syria, Persia, and of the northern portions of Africa, which were once pre-eminent for a numerous population, for wealth and civil refinement. The interests of husbandry have been neglected by the governments—honest industry has come into disrepute, because emulation is not encouraged by the rewards, nor labor protected by the arm of government—the soil is in a measure neglected, and the mass of the people are poor, oppressed and wretched.

Were not comparisons invidious, we might illustrate our text by examples nearer home. But we will be content, at present, with holding up good examples, in the hope, that now that the importance of agriculture has been brought home to our *feelings*, by the vast importations of foreign grain, and the embarrassments of the times, the legislatures of the states will be induced, when a sufficient interval of party strife shall permit, to borrow lessons of instruction from states which have acted wisely upon this subject. Commerce and manufactures are fostered and protected by government at an immense cost to the nation, and the fisheries are encouraged by liberal bounties, while agriculture, upon which all must ultimately rely, for sustenance and support, is left to shift for itself. Were this primary branch of labor enlightened and encouraged by the government, as it has been in Great Britain, and is now being in France, Prussia, Massachusetts, &c. its products would be greatly multiplied, its labors more honored and more followed, and the benign effects of its improvement felt in every department of society.

From the Albany (N. Y.) Cultivator.

OVERTRADING.

It was an excellent rule of an ancient philosopher, when an enemy accused him wrongfully, wholly to disregard the slander; but if justly, quietly to amend his fault. The charge of *overtrading*, applied to the people of the United States, collectively and individually, has certainly much truth to support it, and it will be in us to imitate the philosopher, not to murmur at the accusation, but diligently to endeavor to mend our ways. To *live within our income*, though a trite, is unquestionably a safe and prudent maxim. If a farmer sells $1000 worth of produce in a year from his farm, and buys 1600 dollars worth of goods and nicknacks, he is certainly *going down hill*, and he may expect, in the words of the Prompter, that *every one will give him a kick*. But if he sells sixteen hundred dollars worth, and expends but one thousand dollars, in a year, he is in a *thriving condition*, and every one is disposed to lend him a *helping hand*—so true is it, that we are disposed to help others in proportion as they are inclined honestly to help themselves; for those only who can and do help themselves, are likely to requite the favors we render them.

If we apply these rules to the national family, we shall see that we are in a bad way; for, while we sold, or exported, during the last year, but one hundred millions from the national farm, we bought, or imported, one hundred and sixty millions of foreign goods or products—

thus running in debt sixty millions in a single year. It requires no great foresight to see, that this sort of over-trading will ultimately prove as disastrous to the nation as it would to the individual. And common sense suggests the same remedy for the evil to the nation, that prudence would dictate to the individual, viz: *buy less, and raise and sell more.* The prudent farmer would forego foreign superfluities, live more upon the products of the farm, set his idle boys to work, and by prudent industry and good management, would not only soon be out of debt, but would be able to keep so—he would soon be independent, in the broad sense of the term. If individuals adopt this course, it will become the governing policy of the nation, for the national family is but an aggregation of these individuals.

If these, therefore, who lament the embarrassment of the times, would earnestly go to work to improve them, by imitating the example of the prudent farmer—in buying less, and earning more by their productive labor, the times would soon mend, and individuals and national prosperity and independence would be established. Every man who buys, upon credit, what he really does not want, or what he has not a moral certainty of being able to pay for at the time stipulated, is charged with overtrading.

From the Albany (N. Y.) Caltivator.

PIGS WILL FATTEN ON APPLES.

Plymouth, Conn., Sept. 12, 1837.

J. Buel, Esq.—Dear Sir:—Although it is pretty well established and believed by farmers and others, that hogs can be fattened on apples, pumpkins, &c., yet many people cannot be persuaded that good, solid pork can be made without the aid of corn. For the purpose of removing, as much as possible, objections on that account, I send you, for insertion in the Cultivator, if you think proper, an extract from a letter to me from F. J. Finn, Esq., of this county, written in answer to an inquiry I had made of him, and may be relied on. His letter to me is dated July 12th, 1837.

"As to the apple pork I say, that I shut up my pig the forepart of September. He then weighed fifty-five pounds. The precise day I shut him up I do not recollect. I kept him on apples, raw, promiscuously gathered, both sweet and sour, but mostly sour, say four weeks, till I had potatoes and pumpkins from the field, ripe, and large enough to boil. I then boiled equal quantities of apples, potatoes and pumpkins in a potash kettle, to a complete pudding, by mashing them, while boiling, with a hoe, and of this consistence I fed him twice a day, as much as he would eat. About a fortnight of the last of his feeding, I gave him, in one barrel of the above mixture, four quarts of buckwheat ground. This was his only food.—On the 21st December I killed him, and sold him for $30, weighing nearly 300 pounds. I then pursued the same course with another, which I am now eating. Better pork I never had, and finer ham was never tasted."

Yours, C. BUTLER.

From the Chilicothe Gazette, Oct. 20.

GREAT CATTLE SALE.

Seventeen head of Improved Short-Horned Cattle belonging to the Ohio Company, being mostly of this year's importation and the produce of others, took place at the Sugar-Town in this county, Tuesday last.—The attendance was numerous, comprising a larger number of actual bidders than the previous sale. Among the individuals present who are pre-eminently noted for their agricultural enterprize, were Governor Vance, Ex-Governor Trimble, the Messrs. Renick, Mr. Sullivant, and indeed nearly all of the large farmers of this Valley and the adjacent country. The bidding was consequently very spirited, and the prices obtained for the cattle plainly show that the kind of stock sold is rapidly advancing in public estimation.

BULLS.

Acmon, 3 years 8 months, Mr. Sullivant & Co., Columbus, $2,500

Comet Halley, 5 years, George Renick & Co., Chilicothe, 2,500

Hazlewood, 1 year 6 months, Allen Trimble and R. Seymour. 700

Bouncer, 1 year 7 months, John Walker, Pickaway county, Ohio, 453

Powhatan, 1 year 19 days, Harness Renick, Pickaway county, Ohio, 500

Santa Anna, 3 months 21 days, Joseph C. Vance, Ohio county, Va., 425

COWS.

Flora, 7 years 6 months, M. L. S. Sullivant Columbus, 1,300

Matilda, 6 years 6 months, Allen Trimble, Highland county, Ohio, 1,220

Fidelia, 7 months 18 days, Allen Trimble, Highland county, Ohio, 610

Elizabeth (and Calf,) 5 years. J. & Wm. Vance, Champaign county, Ohio, 1,450

Charlotte, 4 years 7 months, Joseph G. White, Ross county, Ohio, 630

Arabella (and Calf,) 3 years 7 months, Arthur Warts, Chillicothe, 1,200

Blush, 2 years 9 months, John H. James, Champaign county, Ohio, 1,015

Emily, 2 years 8 months, Asahel Renick, Pickaway county, Ohio, 875

Victoress, 1 year 9 months, M. L. Sullivant, Columbus, 700

EXTRACTS RELATING TO SILK.

It appears that the importation of manufactured Silks, during the year ending Sept. 30. last year, amounted to more than *seventeen millions of dollars*, being near a million more than the preceding year.

The Committee of Congress, on the subject of silk, say that the disproportion which has existed for the last twenty or thirty years, between the increase in the consumption of silks and the increase of population, and which is becoming greater every year, will, it is believed, present the *American silk growers* with all the aid and encouragement which may be extended to them by the National and State Legislatures, from producing the *raw material* in sufficient quantities to supply the demand for at least another century. Such being the case no fears need be entertained of our stocking the market, so long as "trees will grow or water run."

The Committee say further, that "could a general diffusion of practical knowledge on the subject of cultivating the tree and raising the worm be effected, no doubt *the United States would finally become one of the greatest silk growing countries in the world.*" A more thorough knowledge of the culture is now pervading every portion of the Union. The State governments are giving encouragement, and nothing wanted but that we should go ahead, under the existing state of things, with more perseverance than has yet been exhibited, and that another year will accomplish more than has been done in any preceding year. Our state governments are holding out encouragement to silk growers which they ought not to neglect.

Among the states offering a bounty, is the state of Maine—offering a bounty of 5 cents on every pound of cocoons grown within the state, and 50 cents on every pound of silk reeled.

Vermont offers a bounty of 10 cents on every pound of cocoon grown within the state.

Connecticut offers a bounty of one dollar on every hundred of Italian or Chinese mulberry trees, cultivated five years, and fifty cents on every pound of silk reeled on an improved reel.

But Massachusetts has done nobly, offering a bounty of 10 cents on cocoons, 50 cents for reeling a pound of silk, and fifty cents on throwing, equal to 2 dollars on the pound. It is now, the present year, ascertained that the bounty will cover the whole expense of gathering the leaves, feeding the worms, reeling and twisting—in other words, of putting it into raw silk; so that every pound of silk raised in Massachusetts, shall be a *clear profit* to the silk grower. What greater encouragement than this can we ask for, when we can produce raw silk free of expense? —*Northampton Courier.*

RAINY DAYS.

How much time is thrown away by some farmers when the weather will not permit them to work out doors. And how well this time might be improved! There are many days and hours of wet weather in a year in which it is impossible to do work on a farm, and when these are lost, as they are by two many farmers of my acquaintance, they amount to a considerable sum. "Time is money," as my grandfather use to say—and further, "take care of the pence and the pounds will take care of themselves."

Now if this is good advice in money matters, it will surely apply to economy in time, to those hours and half days when the rain drives under cover.

Well, how are these hours to be best improved? I will tell my brother farmers: get yourselves a set of carpenter's tools, and make a work bench, and if you can plane a board and drive a nail you will find enough to occupy all your spare time.

The tools will cost but five or six dollars—such as are most necessary, and then you will be able to keep your outbuildings, fence, and many of your farming implements, in good repair. If your barn or stable door break down, mend it immediately the first rainy day. If a board is loose, put a nail in or replace it. If you want any plain, useful kitchen furniture, such as a pine table, benches, &c. take those occasions. But it is unnecessary to multiply the things that might be made or repaired in such times. Every farmer that looks around him (if he is not in the habit of so doing) will find the wood work on his place lamentably out of repair.

Besides, every farmer should accustom himself to the use of tools. When he wants a small job done, it wastes as much time often as it is worth, to go several miles after a carpenter. I know some farmers who have not a hatchet, drawing knife, auger, plane or work bench about their place.

The consequence is, their jobs and repairs generally go undone, and they have nothing to do in rainy weather. Is this economy? Yet such men will carry their grain five miles further to a market where they can get two cents more on a bushel. POOR RICHARD.

And those of our brother farmers who can spare a little time from these things, can write a communication on some useful subject for the Tennessee Farmer.—*Ed. Ten. Far.*

EARLY FRUIT.

There is one thing more than usually vexatious in this world of ours, and that is, to be at considerable pains in collecting early and choice varieties of fruit, and before they can approach maturity, or yourself have a touch of their real quality, to find them disappearing in the maws of your idle neighbor's sons, or in the pack of some vagabondizing commoner. These things, however, must be expected; but there are many farmers who in the article of early fruit are as negligent as those who expect to live on other's orchards and gardens. Now there is no necessity for this. Any man who owns a few rods of ground, can have, and should have, a supply of fruit for himself and family; fruit of most varieties, and such as is adapted to all seasons. There is no propriety in my pestering my neighbor for his early cherries, pears, or apples, when I may just as well have them of my own. Yet how many farmers there are, and mechanics and professional men too, who have orchards of their own, that go without the Junitings, Yellow Harvest, Sine qua non and Bough apples, and rich summer pears, or beg them of their neighbors, when a few shillings expense in the purchase of trees, or in grafting or inoculating, would soon furnish an abundant supply of these desirable fruits. It should be a standing maxim with the farmer, never to be dependant on others for what his own farm can produce; and if those who are now without early fruit will at once set about producing it in the proper way, they will undoubtedly be as much gratified with the result, as those upon whose labors they are now so prone to encrouch.—*Gennessee (N. Y.) Farmer.*

THE SUN FLOWER.

The Sun Flower is a plant of much greater value than is generally known. Instead of a few being permitted to grace a parterre, and considered only as a gaudy flower, experience warrants my saying it should be cultivated by every planter and farmer as part of his provision crop. It can be turned to profitable account on all our plantations; for certain purposes it is more valuable than any other grain known to us; inasmuch as it can be made to yield more to the acre in exausted soil, with little labor, and with greater prospect of success.

Its seed are wholesome and nutritious food for poultry, cattle and hogs, and very much relished by them.

From the seed an oil is obtained, with great facility, as delicate, it is believed, as that of olives.

They are also pectoral. A tea made of them is quite as effective as flaxseed, or any other, in catarrhal affections. On one occasion, this tea, sweetened with honey, was of so much more service to me than the prescriptions of my physician, that I attributed my early restoration to health to its agency alone. Certainly a favorable change did not occur until I used this tea, which I did upon the recommendation of a citizen of one of the upper counties of North Carolina.

Its leaves and stalks, in the green state, are preferred by cattle to any other provinder. I have thrown green grass and fodder in one heap, and sun flower leaves in the other, to try the cattle, and they have commenced eating the latter first; this I have tried often with the same result. The whole plant, cut up in the green state, and boiled with cotton seed, or a little meal, affords a delicious food for cattle and hogs. To be convinced of this, let one taste the bruised leaves or stalk of the plant; he will find its flavor aromatic like that of the parsnip, with more sweetness.—*Southern Agriculturist.*

From the (N. Y.) Genesee Farmer.

DEEP AND SHALLOW PLOUGHING.

Erroneous conclusions are sometimes drawn on this subject, from very partial observations. Deep ploughing in soils naturally shallow, always necessarily throws up much of the unproductive subsoil. Where the land is thus ploughed but once, this subsoil is thrown uppermost, hence the crop is often very deficient. Where the ploughing is repeated, the upper, fertile soil, and the subsoil become mixed, consequently the soil though deeper, is less fertile than at first; and a diminished crop is still the result, especially in case of those crops whose roots are confined chiefly to the surface. Experiments, such as these, have induced the belief with some that deep ploughing is in all cases useless, if not positively detrimental.

But the error of this belief is proved by the fact, that with nearly all crops, the heaviest are obtained from deep fertile soils. Where the quantity of manure to be applied to land is limited, it will generally produce a much greater effect on the crop if not ploughed deep beneath the surface. Soils, naturally shallow, should therefore be *gradually* deepened by successive ploughings each year, during which the quantity of manure applied should be such as to preserve the original fertility.

As a moderate quantity of manure, however, will often effect much more by shallow ploughing, than the same quantity when deeply buried it is very necessary that discretion be used in determining the proper depth.

The Legislature of Illinois has passed a law to prevent steam boat racing.

STEAMING VEGETABLES.

J. BUEL—*Dear Sir:* The method of cooking potatoes, turnips, &c. by means of steam, for feeding hogs, I believe would be universally preferred and adopted, were it not supposed that the steaming apparatus would be too expensive for farmers generally to provide. The operation of steaming potatoes can be performed with less trouble than that of boiling. In Vol. II No. 7, of the Cultivator, is a cut and description of what you consider to be a very good apparatus; the expense of which is estimated at about fifty dollars. And you very justly conclude that farmers cannot afford so great an outlay for this purpose, who have less than fifteen or twenty hogs to feed.

But, sir, the object may be attained in a much less expensive way. Any farmer who begins work in the morning, who can borrow an auger and use it, may provide himself a good steaming apparatus in one day. We have had one in use two or three years, such as I shall attempt to describe.

Every farmer has an iron kettle, commonly called *the great kettle*, which will answer very well for a boiler. Let such an one be properly set in an arch; fit a cover of inch boards within the rim, and lute it with clay to make it tight. A piece six or eight inches wide should be nailed across the cover to keep it from being warped. Make a whole in the centre of the cover large enough to receive a tube of two inches caliber, to convey the steam. Another hole two inches in diameter is to be made near one side of the cover, through which the boiler is supplied with water, and is stopped with a plug. Make a box for potatoes, &c. three feet long, sixteen inches wide, and two feet high. This is set over the boiler, resting upon the arch; the bottom of which should not be more than four or five inches above the cover of the boiler.—The hole in the bottom of the box to receive a tube from the boiler, is made near to one side of it; the box covering but little more than half the boiler, leaving a convenient space to fill it through the plug-hole. The tube should project half an inch through the bottom, to prevent the drippings from the potatoes running into the boiler. The position of the box should be a little inclined; the lower end projecting beyond the arch for the convenience of taking out the potatoes when cooked. This end of the box is made with a slide to draw upwards, when the cover is taken off. There is also a closely perforated bottom within the box, placed an inch and a half above the first, that the steam may be equally diffused throughout the mass. The end of the perforated bottom next to the open end of the box, is fastened to round sticks passing through the box from side to side, and serves as a hinge to this bottom. On the other end of the perforated bottom, let a board of of the same width be fixed that shall rise near to the top of the box, having a hole in it to insert a hook for the convenience of raising it when it is to be emptied; if it be required to do so while the potatoes are steaming hot. Thus the box may be readily emptied of its contents without stopping up the holes in the bottom, as would be unavoidably done with a hoe or shovel. The cover of the box should be secured from being warped.

Should it be required to steam on a larger acale than this, two such kettles may be used in an arch, and the steam from both conveyed into a box of greater dimension.

The method of placing the potatoes or other food to be cooked, above, and very near to the boiler, is manifestly more economical than that by which the steam is conveyed the distance of several feet in a metallic pipe; as in the latter case a considerable portion of heat is evidently lost before it reaches its destination.

Yours, &c.

NATHAN LOOMIS.

Butternuts, Otsego county, July, 1837.

PURIFICATION OF TAR.

Tar contains a certain quantity of pyroligneous acid from the wood which produce it, and which in time occasions the destruction of cordage by thickening, in the manner of pitch, as soon as the oily portions have disappeared.—This change prevents the threads from stretching, and of course they must break, although they may still be sound. The acid should therefore be carefully extracted from the tar.—This is effected by washing it in clean lime water. They are to be well agitated together in any suitable reservoir, by a convenient instrument of any kind, changing the lime water frequently, and continuing the operation until a good test paper indicates a freedom from all acidity.

Tar thus purified is a good preservative of wood, which it defends from decay much longer than common tar, because the acid attracts moisture from the air, and retains it in the fibres of the wood; but purified tar repels moisture, and thus acts as a preservative.—*Jour. des Conn. Usuelles.*

A NICE LITTLE DISH OF BEEF.

Mince cold roast beef, fat and lean, very fine add chopped onion, pepper, salt, and a little good gravy, fill scollop shells two parts full, and fill them up with potatoes mashed smooth with cream, put a bit of butter on the top, and set them in an oven to brown.

From the (Ga.) Journal.

FARMERS LOOK OUT.

I have to day seen bills of the Columbus Bank passed off on one of my neighbors by a merchant of that place, payable twelve months after date—If this is not swindling I am no Judge of its character. It is the duty of every friend to justice to notice this foul imposition upon the public, therefore believing that I am discharging my duty to the citizens of Western Georgia, warn all persons interested to be on their guard.

I should judge a merchant's credit to be very low that would discount his note at 60 or 90 days for promissories of a corporate institution payable at 12 months, merely because it paid specie through the hard times. Perhaps though the Bank is buying the cotton on its own account, by which it calculates to raise funds in New York, that will immediately meet all demands against it for specie.—And if so the fact is more glaringly felonious—Say the bank upon its credit for paying specie, places in the hands of its agents bills of the usual form, save twelve months after date, in place of on demand, knowingly for the purpose of defrauding the farmers out of the interest on one, two, three, or four hundred thousand dollars for twelve months. There is not one farmer out of ten that would think of examining the bills of the Columbus Bank or suspect it of attempting fraud upon the public. But even there we find corruption which is enough to impress upon the mind of every man the propriety of dealing with an honest man as we would with a rogue.

JEFFERSON.

WILSON'S MOWING MACHINE, OR GRAIN AND GRASS CUTTER.—The machine consists of a carriage on two wheels, propelled by one or two horses or oxen, travelling in the rear and pushing it forward. In the front, at the bottom, is a horizontal wheel upon an upright shaft, which shaft and wheel receive a rotary motion, communicated by gear from the main axle, which revolves with its wheels as the machine goes forward. The diameter of this horizontal wheel, with the addition of the knives projecting from its edge, measure the width of the swathe, which is cut with the knives as the wheel goes forward, revolving rapidly and lying close to the ground. The apparatus which sustains the cutting wheel, is so constructed as to accommodate its height, to any irregularities in the ground, and to give it any inclination required. The knives are sharpened by their own operation, without stopping the machine. There is also attached to the cutting wheel, wings, which gather the grass or grain as it is cut, and lays it in a swathe more regular than can be done with a scythe.

The machine is so constructed as to be guided with ease in any direction, and may be used in an orchard, as it can be turned in twice its length, and cut the swathe clean. With common industry, a man, with a pair of horses, can cut from twelve to fifteen acres per day; and, as it supercedes the necessity of spreading, must at least accomplish the labor of that number of hands.

Am. Month. Magazine

FLEXIBLE GLASS.

A manufacturer, near Dewsbury, (Eng.) has discovered an improvement in the manufacture of glass, rendering it so pliable that they can make a cloth or fabric of the finest texture.—They have pieces of this 2½ yards long, and from 9 inches to 35 in breadth; they have made some very fine ladies' head dresses or ornaments, from this material, which are considered both curious and useful.—*N. Y. Times.*

Indolence the parent of vice.—It is a fact, which cannot be controverted, that the want of mental and manuel employment, often proves an incentive to vice, which infallibly will produce misery; and, so surely as the earth will bring forth noxious weeds, when left uncultivated, so surely will one vice beget another; which, if not eradicated will multiply to an alarming extent, until its victims becomes a pest to civil society, and a disgrace to mankind.

Bridgeman,

Pruning of the vine.—A correspondent in the Southern Agriculturist, has detailed in that journal, a successful mode which he has practised of training or pruning the vine. It is to train up only the main stem taking or pinching off all lateral shoots as fast as they appear, in summer, except those bearing fruit, and to pinch these off also above the fruit. In this way his vines bore early and abundantly—the fruit did not rot, but attained high maturity and delicious flavor.

LONG MANURE.

I have tried the experiment this season on my garden, with most convincing success.—Having a very retentive subsoil, I tried the plan of burying coarse dry straw under my beds of beets, carrots, parsnips, peas, beans, vines, and almost every kind of vegetable that I planted, to serve as an underdrain as well as manure. The effect has fully convinced one sceptic. I hope others will try it. This is the first time I ever saw straw used for manuring any crop, except potatoes. I have toiled many a day to rot it, so as to make it, "fit to use for the next crop."

David Prentice, long the talented editor of the Glasgow Chronicle, is dead.

From the Franklin (Ky.) Farmer.

Approving heartily the spirit of the subjoined proposition, taken from the Oct. No. of the Cultivator, we beg leave to offer a suggestion on one branch of it. No premium could be offered in a more fit and appropriate shape, than in that of an agricultural paper; and none could be offered more practically useful. But the value of the premiums generally awarded, is considerably greater than the price of any such publication; and we propose that our Kentucky Societies, shall not only include the Cultivator in their premiums, but every other respectable agricultural publication in the United States—say at any rate, at least five or six. The average price of these papers may be stated at two dollars, and the value of premiums at an average of ten dollars. But, where Societies offer papers as premiums, we have no doubt the publishers would universally afford them on lower terms. By adopting this suggestion, the papers from all parts of the union would become better known, and information on the modes of cultivation adapted to the varieties of soil and climate in our country be more widely disseminated; and we trust a higher spirit of emulation, and at the same time a goodly feeling of fellowship would prevail, between the distant portions of our country. What say the Agricultural Societies in the other States to this proposal? We endorse for Kentucky. Let us hear from the distant press.

"A new proposition, to extend the circulation of the Cultivator, or some other agricultural paper. It is this:—

Make it an invariable rule, that every agricultural premium, should include a copy of such paper, which should be given by the person receiving the premium to some one who had never taken it—always taking it for granted that no one would ever get a premium unless he was a patron of such paper. And further, let those who are able and willing, raise a fund, say $500 for gratuitous distribution of the Cultivator, among those who are either unable or unwilling to pay, but who would be willing to read. Let every friend to the proposition subscribe such amount as he will give, as soon as it is ascertained that $500 can be raised. To begin, although poorly able to do it, I will subscribe $5. I hope it will not stand long alone.

I am, respectfully, yours, &c.

SOLON ROBINSON."

From the (N. Y.) Genesee Farmer.

CONSTRUCTION OF ICE HOUSES.

As the present is a suitable season for attention to ice houses, a few short directions relative to their construction, may not be unacceptable.

The most usual method is to place the apartment for containing the ice, below the surface of the earth. When this is done, the pit should be 8 or 10 feet wide, and about 12 feet long, and should be sunk to a depth of at least 8 feet. Posts made of 4 inch scantling, are placed round it, at a few inches distance from the walls of the pit; on the opposite sides of these, boards are nailed horizontally, thus leaving a space between the two partitions thus formed, and another between these and the earth around them. These spaces are to be filled with the exhausted bark of tan pits after it has been made dry.—Similar spaces, made beneath the floor, are to be similarly filled. These walls, thus construeted, should project a foot or two above the ground and should be surmounted by a very steep roof, also made double, the intervals between the boards being filled with powdered charcoal. It is to be painted white outside, to prevent the absorption of the rays of the sun. The steepness, and consequent height, of the roof affords a convenient passage into the house through a triangular door at one end.

The pit is divided into two apartments by a double partition, filled with tan. One of these, which should be the largest, and most remote from the door, is for the reception of the ice. The other is employed as an entry, at the *bottom* of which is a door made also double and filled with tan, through which the ice is withdrawn as it is needed for use. This entry may be employed for keeping butter, milk, &c., during the heat of summer. The space above the ice is to be filled with dry straw, after the ice is deposited.

It is not essential that the ice house be made beneath the surface of the ground, as many are now constructed entirely above, and answer the purpose perfectly. But in this case the walls of tan should be much thicker.

The ice for filling may be drawn any time during winter, but it should not be deposited except during the coldest weather. It should be cut into regular blocks and as closely packed as possible, all the interstices being filled with pounded ice.

The Gennessee Farmer in speaking of the Agricultural Associations in Massachusetts, makes the followidg oppropriate remarks:

Yankee (Me.) Farmer

Here is found a common ground on which all the sons of the Pilgrims can unite—where feelings of gratitude to the Bountiful Provider for human wants can be excited and cherished and sentiments of noble and honorable emulation be encouraged. Nothing tends more to elevate men above the petty dissentions of party—to do away the thousand causeless jealousies

that spring up to embitter the springs of social existence—to closer draw the ties thrown around every individual of the great family compact, and bring them to a more perfect union and cordiality of feeling—to awaken new hopes and new aspirations, give enlarged views and correct erroneous theories, than the assemblages of practical farmers, which takes place at these anniversaries.

We are confident no farmer can attend such exhibitions without returning to his home better satisfied with himself, with better and more kindly feelings towards the world, more fully impressed with the important and honorable nature of his business, and fully resolved to make new efforts in the career of honest and useful industry. To our agricultural brethren at the east we can only say—go on and prosper!—acquire knowledge, acquire experience, cultivate your own resources, and your hills will become surer sources of wealth than the prairies of a western wilderness. Other and similar institutions in that section of the country will hold their meetings in due season, and contribute their impulse to the return of a better state of feeling and prosperity to the New England Farmers.

From the Baltimore Farmer and Gardener.

MULBERRY CULTURE.

Believing that the fall is the best season for persons at a distance to procure their supplies for early spring planting, we take the liberty of stating that we have between 25,000 and 30,000 Morus Multicaulis, or many-stalked Mulberry trees for sale. The roots are chiefly *two* and *three* years old, and if planted on the first opening of the earth next spring, might be fed from next season. Anxious to spread the culture abroad, we shall sell our trees with their heads undespoiled of their limbs, and to such individuals or companies as will take 3000 or upwards, we will make the price an *object*.—That this variety of the mulberry is better adapted than any other to feeding the silk worm, there can be no question; this fact, together with the firm conviction which rests upon our mind, that the culture itself, if properly fostered, is calculated to confer lasting benefits upon the country, make us solicitous to see it prosper. Persons wishing to know our terms will please address *Edward P. Roberts*, Baltimore, Maryland.

From the Portland, (Me.) Yankee Farmer.

PRESERVING ROOTS.

After potatoes and other roots are put into the cellar, they should be kept from the light and air. Some cellars are provided with glass windows by which they are kept light through the winter, but roots of all kinds will not keep so well in such cellars unless they are put in close casks, boxes, bins or pens and covered up closely. If there be a small quantity of live earth with roots in general when they are put into the cellar, and they are kept in the same condition as when taken out of the ground without becoming dry, they will remain sweet and good, but if they are dry and exposed to light or heat, they lose their life, sweetness, and good qualities. Last fall we put beets, carrots and turnips in close casks with earth, first a layer of earth, then a layer of roots, and they kept perfectly well and were as good in May as they were in the fall. These roots were all such kinds as do not usually keep well without some care. They were the early turnip rooted beat. Early Horn carrot and the common English and Early Garden Stone turnip. We used pure live earth with a foot or so from the surface that it might be free from manure or other impurities.

TO DESTROY THE HESSIAN FLY.

A farmer in Ohio has adopted the following successful expedient:—He sows early in September, and feeds it down in November. The fly is lodged in the lower joints of the grain, and is *bitten off and destroyed* by the cattle or sheep which feed upon it. The wheat becomes well established by being sown early, and shoots so vigorously in spring as to be little if any affected by the fly. An experiment was made in two adjoining fields, sown at the same time: one was *not* fed down, and was nearly destroyed by the Hessian fly; the other *was* fed down, and wholly escaped the insect. We state this on the best authority.—*Albany (N. Y.) Cultivator.*

SMUT IN GRAIN.

We are surprised to learn that smut is still permitted to adulterate and diminish our grain crops, when it is a fact amply and satisfactorily established, that steeping the seed grain 12 hours in brine, and rolling it in fresh slaked lime, before sowing, will prevent the evil.—The *pepper-brand* and *dust-brand*, the two species of smut, are parasitic plants, the minute seeds of which attach to the grain, and are propelled through the sap vessels of the plant, to the germs of the young grain. The salt and lime destroy the vitality of these seeds.

Albany (N. Y.) Cultivator.

Sheep of the Bakewell breed, raised by Daniel Adcock, of Gilbertsville, Otsego county, were weighed as follows: A three year old weather, 239 lbs.; do. ewe, 135 lbs.; two year old buck, 234 lbs. The average weight of the fleece was eight pounds.—*Gen. (N.) Y. Far.*

From the Hallowell Maine Farmer.

The following piece, composed for the occasion, was sung at the Meeting-house in Winthrop, on the second day of the Kennebec County Agricultural Society's Cattle Show and Fair.

ORIGINAL HYMN.

In smiling Eden's peaceful bowers,
'Mid streams, and plants, and varied flowers,
Where guileless Eve and Adam knelt,
A Heaven-instructed farmer dwelt.

God gave him skill,—*He* taught the art
Of husbandry;—man's rebel heart
Not then, as now, inventions sought,
To hasten time, and banish thought.

Vetrans in honorable care!
Though hard your toil, and though ye wear
A plainer garb, than fashion's sons,—
Your calling God ordained, and owns.

Miriads there are, who live on *wrong;*—
On unrequited toil;—the strong
Oppress the weak;—*ye turn the sod*
Yourselves,—and fear no power but God.

O happy husbandmen! Survey
Your goodly heritage;—to day
Give thanks,—with Autumn's fruits around,
Jehovah's name with praise be crowned.

Ye see His wonders, that adorn
Each varying season, night, and morn:
Adore His power! Extol His grace
In Christ! and humbly seek His face.

A PRETTY PIG.

Mr. William Nelson of Bradford bought a pig April 14th, weighed 21 pounds—it was killed Sept. 30th and weighed when dressed, 226, gaining 205 lbs. in 170 days.—*Haverhill Gazette.*

The following composition, is very good to remove a swelling on horses.

Hogs lard, oil Vitriol, and spirits of Turpentine, mixed; sufficient oil of Vitriol must be put in to make the composition a dark brown color, and rub the part affected twice a day with a small quantity at a time.—*Gennessee (N. Y.) Farmer.*

BEEF STAKE PIE.

Cut nice steaks and stew them till half done put a puff paste in the dish, lay in the steaks with a few slices of boiled ham, season the gravy very high, pour it in the dish, put on a lid of paste and bake it.

EGYPTIAN WHEAT.

The following paragraph, showing the very curious mode in which this wheat was introduced into the Winconsin territory, is taken from the Chicago American of 14th inst.:

"We have received a specimen of Egyptian wheat, raised this season on Rock river. The seed was taken by our informant from the crop of a bird of passage, and this is the second season in which he has cultivated it. Four or five seeds were all that he put in the ground the first season, and this year he has a spot full of it. It has three pronged stems, and is a beautiful and superior production."

ADDITIONAL AGENTS.

JOHN HOWARD, Esq., Tennessee River P. O., N. Carolina.

R. J. TERRY, P. M. Keyesburg, Ky.

THO. HENINGWAY, Sandersville, near Lexington, Ky.

The Post Master at Lexington, Mr. FICKLIN, is also our Agent. He was announced some time ago.

Agents and others making remittances for our subscribers will please in *all cases* to mention the Post Office at which the subscriber receives his paper, otherwise error may be committed from their being frequently two (and sometimes more) of the same name on our list. Another reason why it should be done is, that it is almost impossible to find any one man's name amongst so many hundred unless we know at what Post Office to look for it.

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